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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/880,658	06/13/2001	Benjamin N. Eldridge	276440-6	7329

7590 05/21/2003

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EXAMINER

PERT, EVAN T

ART UNIT PAPER NUMBER

2829

DATE MAILED: 05/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/880,658

Applicant(s)

ELDRIDGE ET AL.

Examiner

Evan T. Pert

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) 1-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 30-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4,9.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Election/Restrictions

1. Claims 28-29 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made without traverse in Paper No. 10.

Priority

2. This application is designated as a CIP of earlier filed application serial numbers 09/795,772, 09/781,833, and 09/710,539. However, copies of these applications were not provided by applicant and were unavailable at the time of this writing. Applicant is advised to provide copies of these applications, including claims and specification, for consideration of new matter with respect to reliance on 35 USC 120.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 30-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Eldridge et al. (U.S. 5,974,662).

Claim 30

Regarding claim 30, the '662 patent discloses: a test head assembly for contacting a plurality of electronic devices on a semiconductor wafer (cover figure), the test head assembly comprising: a circuit board (i.e. probe card circuit board 502) having a plurality of contact areas (i.e. 510) disposed on a circuit board surface thereof; an interposer (i.e. 504) disposed in alignment with the circuit board (i.e. 502) adjacent to the circuit board surface, the interposer comprising a planar substrate having opposing interposer surfaces, a first plurality of integrally formed spring contacts (i.e. 514) mounted to the planar substrate, and extending from a first one of the opposing interposer surfaces, a second plurality of integrally formed spring contacts (i.e. 516) mounted to the planar substrate, and extending from a second one of the opposing interposer surfaces, wherein corresponding ones of the first plurality of integrally formed spring contacts (i.e. 514) are connected to corresponding ones of the second plurality of integrally formed spring contacts (i.e. 516), and contact tips of the first plurality of integrally formed spring contacts (i.e. 514) contact corresponding ones of the plurality of contact areas (i.e. 510); a substantially rigid contactor substrate (i.e. space transformer 506) disposed in alignment with the interposer (i.e. 504) adjacent to the second one of the opposing interposer surfaces, the contactor substrate comprising a planar contactor surface having a first plurality of contact elements disposed thereon (i.e. 522) and positioned to contact corresponding terminals (i.e. 526) on the semiconductor wafer (i.e. 508), and an opposite connecting surface having a second plurality of contact elements (i.e. 520) disposed thereon, wherein corresponding ones of the first plurality of contact

elements (i.e. 522) are connected to corresponding ones of the second plurality of contact elements (i.e. 520), and ones of the second plurality of contact elements (i.e. 520) contact corresponding contact tips of the second plurality of integrally formed spring contacts (i.e. 516); and a fixture connected to the circuit board (e.g. 530, 534, etc.), the interposer (i.e. 504), and the contactor (i.e. space transformer 506) for holding the circuit board, the interposer, and the contactor in relation to one another (col. 27, lines 34-63).

Claim 31

Regarding claim 31, the fixture in the '662 patent includes adjustment means for aligning the contactor in relation to the circuit board (such as the screws that tighten the fixture to hold in alignment seen in the cover figure in view of col. 27).

Claim 32

Regarding claim 32, the first plurality of contact elements in the '662 patent "include" non-resilient contact pads (i.e. 522 at base of 524 are inherently non-resilient since they are just contact pads).

Claim 33

Regarding claim 33, the plurality of contact areas (510) in the '662 patent are disposed on the circuit board surface in positions *corresponding* (i.e. "electrically *corresponding*") to the terminals (i.e. 526) of the semiconductor wafer (i.e. 508).

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Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Evan T. Pert whose telephone number is 703-306-5689. The examiner can normally be reached on M-F (7:00-3:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamand Cuneo can be reached on 703-308-1233. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

ETP
May 15, 2003


EVAN PERT